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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/785,368

02/25/2004

Aldo Eagle

JM-2003

8959

7590

05/25/2006

Alfred E. Miller  
406 West Putnam Avenue  
Greenwich, CT 06830

EXAMINER

WERNER, JONATHAN S

ART UNIT

PAPER NUMBER

3732

DATE MAILED: 05/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

SP

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/785,368	EAGLE, ALDO	
	<b>Examiner</b>	<b>Art Unit</b>	
	Jonathan Werner	3732	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 3/17/06.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 2-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date: _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date: _____  | 6) <input type="checkbox"/> Other: _____                                    |

### **DETAILED ACTION**

1. This action is in response to Applicant's amendment received on 3/17/06.

#### ***Claim Objections***

2. Claim 9 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Currently claim 9 depends from claim 9. For the purpose of examination, Examiner will understand claim 9 to properly depend from claim 8.

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 3 and 5-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 3 recites the limitation "said plunger." Claims 5-7 recite the limitations "said first section" and "said second section." There is insufficient antecedent basis for these limitations in the claims.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 15, 2, and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Marlin (US 6,168,432). As to claim 15, Marlin discloses a two-part needle for injecting heated thermoplastic material into a dental cavity comprising a rear tubular part (16,12) of greater diameter than a front part (74; Figure 7); a chamber in the rear part (78); an open ended cartridge provided with a nozzle (80); having heated thermoplastic material positioned in said chamber (column 3, lines 19-22); plunger means in said syringe for forcing said thermoplastic material through the needle (14; and col 3, ln 1-2); and wherein the needle is capable of disposed after use. As to claim 2, Marlin discloses the length of the front part of the needle can be selected from 20 mm to 30 mm (col 4, ln 9-12) and is bendable (col 3, ln 23-27). As to claim 6, Marlin discloses that each part of the needle is attached to each other by brazing (col 1, ln 29-30). It should be noted however, that applicant is claiming an article of manufacture and not the process of forming/making the device, accordingly, the manner in which the device is formed, i.e. brazing, is not given patentable weight.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 3, 8-9 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marlin in view of Botich (US 5,407,431). As to claim 3, Marlin discloses a needle for injecting heated thermoplastic material into a dental cavity as previously described, but fails to show a circumferential external groove on the rear part, wherein an O-ring is inside said groove. Botich, however, teaches the use of a needle having a rear part with a chamber (21,31), wherein said part has a circumferential external groove (41) with an O-ring (39) in said groove whereby the end of the chamber remote from the plunger is defined therein (Figures 2-3). Therefore, it would have been obvious to one having ordinary skill in the art at the time of applicant's invention to include an external groove with an O-ring in said groove in order to provide a sealing engagement for the chamber and its housing as taught by Botich. As to claim 8, Marlin discloses a needle for injecting heated thermoplastic material in a dental cavity comprising a rear tubular part (16,12) provided with a funnel-shaped opening (14) adjacent said syringe (Figure 2); a front part (74; Figure 7) having a smaller diameter than the rear part; an open ended cartridge (80); having heated thermoplastic material positioned in a chamber (column 3, lines 19-22); and plunger means in said syringe for forcing said thermoplastic material through the needle (14; and col 3, ln 1-2). Marlin fails to show

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the rear tubular part having a circumferential groove defining the end of a chamber remote from a funnel-shaped opening. Botich, however, teaches the use of a needle having a rear part with a chamber (21,31), wherein said part has a circumferential external groove (41) with an O-ring (39) in said groove (Figure 2-3) remote from a funnel-shaped opening (27, Figure 3). Therefore, it would have been obvious to one having ordinary skill in the art at the time of applicant's invention to include an external groove with an O-ring in said groove in order to provide a sealing engagement for the chamber and its housing as taught by Botich. As to claim 9, Marlin discloses the thermoplastic material is gutta percha (col 3, ln 5-6). As to claim 11, Marlin discloses plunger means that correspond to a configuration of a funnel-shaped opening in the rear tubular part (14, Figure 7).

6. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Marlin in view of Botich further in view of Brandhorst (US 5,722,830). Marlin and Botich disclose the two-part needle as previously described while Botich also shows that the groove (41) forms a narrow opening in the chamber. However, Marlin and Botich fail to show that the nozzle of the cartridge projects through the narrow opening. Brandhorst teaches a dental substance dispenser that has a cartridge (20) wherein the nozzle of said cartridge projects through the narrow opening (28,29) formed from a groove (13,15). Therefore, it would have been obvious to one having ordinary skill in the art at the time of applicant's invention to make the nozzle of the cartridge project through the

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narrow opening created by a groove in order to ensure that the end of the nozzle will retain its orientation with respect to the engaging cartridge as taught by Brandhorst.

7. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Marlin in view of Osborne (US 2002/0019595). Marlin discloses a needle for injecting heated thermoplastic material into a dental cavity as previously described, but fails to show that each section of the needle is attached to each other by soldering. It should be noted that applicant is claiming an article of manufacture and not the process of forming/making the device; accordingly, the manner in which the device is formed, i.e. soldering, is not given patentable weight. Still, for the purpose of examination, Osborne teaches a needle with a first section (20) and a second section (30) wherein each section is attached to each other by soldering (paragraph 33). Therefore, it would have been obvious to one having ordinary skill in the art at the time of applicant's invention to solder each section together in order to ensure a strong, welded connection as taught by Osborne.

8. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Marlin in view of Fischer (US 6,422,865). Marlin discloses a needle for injecting heated thermoplastic material into a dental cavity as previously described, but fails to show that each section of the needle is attached to each other by gluing. It should be noted that applicant is claiming an article of manufacture and not the process of forming/making the device; accordingly, the manner in which the device is formed, i.e. gluing, is not

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given patentable weight. Still, for the purpose of examination, Fischer teaches a needle with a first section (40) and a second section (60) wherein each section is attached to each other by gluing (col 7, ln 8-12). Therefore, it would have been obvious to one having ordinary skill in the art at the time of applicant's invention to glue each section together in order to ensure a strong, adhesive connection as taught by Fischer.

9. Claims 10 and 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marlin in view of Botich (US 5,407,431). As to claim 10, Marlin discloses a needle for injecting heated thermoplastic material into a dental cavity as previously described, but fails to show a circumferential external groove on the rear part, wherein an O-ring is inside said groove or a plunger. Botich, however, teaches the use of a needle having a rear part with a chamber (21,31), wherein said part has a circumferential external groove (41) with an O-ring (39) in said groove (Figure 2-3) and the presence of a plunger (59). Therefore, it would have been obvious to one having ordinary skill in the art at the time of applicant's invention to include an external groove with an O-ring in said groove in order to provide a sealing engagement for the chamber and its housing and to provide a plunger to the injection device in order to force injectate through the device as taught by Botich. As to claim 12, Marlin discloses that the thermoplastic material is gutta percha (col 3, ln 6-7). As to claim 13, the needle is fabricated of a metal alloy (col 1, ln 46-47).



10. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Marlin in view of Botich further in view of Berke (US 5,461,445). Marlin and Botich disclose a needle for injecting heated thermoplastic material into a dental cavity as previously described, but fail to show the needle is fabricated of a thermo-conductive plastic. Berke, however, teaches a needle that is fabricated from conductive plastics (col 5, In 67-68). Therefore, it would have been obvious to one having ordinary skill in the art at the time of applicant's invention to make the needle out of a conductive plastic material in order to reduce the extent of grinding operations as taught by Berke.

### ***Response to Arguments***

11. Applicant's arguments with respect to claims 2-15 have been considered but are moot in view of the new ground(s) of rejection. Applicant points out that it is apparent from the Marlin reference that some remnants of the heated material will remain in the passageway of the needle after being injected in the cavity, which then would have to be cleaned. Applicant asserts that this is not the case with the present invention. However, a recitation of the intended use of the claimed invention and how said invention functions must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim, as discussed in the rejection above.

12. Applicant further remarks that the needle disclosed by the Botich reference does not include a chamber for an open-ended cartridge for thermoplastic or other materials for injection. However, as stated in the previous Office Action, Marlin discloses a chamber in the rear part and an open ended cartridge provided with a nozzle wherein heated thermoplastic material is positioned in said chamber and whereby the Botich reference is used to teach the modification of Marlin to incorporate a groove with a corresponding O-ring as discussed above. Similarly, Applicant asserts that the other cited patents "do not show a needle for use with a syringe that is a unitary device having a cartridge with material to be expelled in the needle and which is disposable as a unit." However, each reference used in the rejections teach the specific claimed feature associated with it and its associated reason for combining. Therefore, there is a suggestion to combine the references. Examiner notes that recognizing that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so can be found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

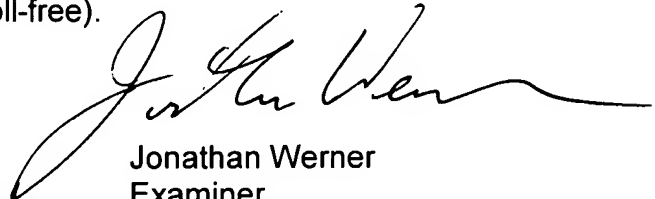
§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan Werner whose telephone number is (571) 272-2767. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patricia Bianco can be reached on (571) 272-4940. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jonathan Werner  
Examiner  
TC 3700

5/11/06



MELBA N. BUMGARNER  
PRIMARY EXAMINER